

DOCUMENT RESUME

ED 181 516

CS 502 791

AUTHOR Hample, Dale
 TITLE Purposes and Effects of Lying.
 PUB DATE Nov 79
 NOTE 31p.; Paper presented at the Annual Meeting of the Speech Communication Association (65th, San Antonio, TX, November 10-13, 1979)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Behavioral Science Research: *Credibility: Ethics: Individual Characteristics: *Integrity: *Interpersonal Relationship: *Social Problems: Socioeconomic Status
 IDENTIFIERS *Communication Research: *Lying

ABSTRACT

Three exploratory studies were aimed at describing the purposes of lies and the consequences of lying. Data were collected through a partly open-ended questionnaire, a content analysis of several tape-recorded interviews, and a large-scale survey. The results showed that two of every three lies were told for selfish reasons, while three of every four lies were told to social or economic superiors. These results suggest that the dominant reason for lying is to equalize imbalanced interpersonal relations, and that liars are consistently more satisfied with their lies than with themselves. Since social proscription against deceit creates personal costs for the liar (costs that are difficult to assess), lying probably occurs most often when rewards are both large and assured. Many lies are told repeatedly, in identical situations; so they are presumably field-tested for both costs and benefits. (Author/RL)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED181516

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PURPOSES AND EFFECTS OF LYING

By

Dale Hample

Western Illinois University

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
Dale Hample

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Presented to the annual meeting of the Speech Communication Association, San Antonio, November 1979. The author wishes to thank Dr. Marijan R. Paskov, for serving as interviewer for the second investigation, and for assisting in its coding.

CS502791

PURPOSES AND EFFECTS OF LYING

Lying is a theoretically important kind of communication. Ehninger argues that communication relies on respect for the rule, "When talking with another person, 'say' only what you know or believe to be the case." In fact, he says, inferences grounded in the assumption that a speaker is telling the truth are more basic than logical, semantic or institutional inferences.¹ Communication researchers generally assume that such a rule is in force, as even the briefest survey of self-disclosure studies reveals. Nearly all our research requires that one's utterances genuinely reflect one's self in some way. Lies seem to be regarded as violations or pollutants of communication, rather than as phenomena of intrinsic interest. Thus, our research on lying deals with detecting it, not understanding it.²

Some empirical evidence relates to possible purposes of lying. Bargaining research indicates that game players in relatively vulnerable positions lie more often, and benefit by it.³ People will misrepresent their opinions either to avoid being classed with an obnoxious (but attitudinally similar) other, or to avoid making a handicapped interviewer feel uncomfortable.⁴ Studies on children indicate that they will lie to protect a peer from punishment.⁵

Other work points to some uniformly negative consequences of lying. Liars are disliked in proportion to the number of lies they tell, and are thought to be unfair.⁶ Lies and cheating are associated with untrustworthiness, flouting the law and having trouble in school.⁷ Perhaps because of these associations, people forced to lie try to dissociate themselves from the falsehood by making fewer references to themselves and their self-interests than when truthfully expressing opinions.⁸

Though none of this research has produced surprising results, there is not very much of it, and it does not represent a systematic research effort.

Little of it was done to explore deceit; many of the cited findings are sidelights in the original reports. It is possible, of course, that lying has simply not seemed important to many investigators. But an equally plausible explanation for the limited research effort is the investigator's ethical dilemma. If a researcher actually induces people to lie naturally, their privileged position as subjects in a scientific study may have been unfairly exploited. On the other hand, if the investigator does not study presently-occurring lies (e.g., by instead asking respondents to recall falsehoods), the accuracy of the data may be in question.

The studies described in this report do not use any objective determinations of when a lie has occurred (as a laboratory experiment might). Instead, the research depends on the subjects to recall or judge lies from their own histories. Obviously, respondents may have lied to the investigators, and this possibility casts a shadow over all the data based on students' recollections of lies they have told. Therefore the personal history studies are supplemented by a less personal survey concerning "other people's lies." Though this indirect approach sacrifices some richness of data, it greatly strengthens confidence in several basic findings.

The objective of the research is to discover the purposes and effects of lying. It is frankly exploratory, and initially seeks to test no hypotheses. The first studies rely on open-ended questions. From these, more structured items were developed for the later survey.

Personal Histories

Two separate studies are reported in this section. Each focused on a single question--"Think of a lie you have told and describe it"--in the hope of identifying clues to the purposes and effects of lying. The first study used an in-class questionnaire, while the second consisted of personal interviews.

Method

Questionnaire data were collected from thirty-nine undergraduates enrolled in three sections of the basic public speaking course at the author's institution. Nearly all the students were seniors and juniors. Two of the sections were the author's, but topics related to the research had not been discussed in class prior to data collection. Instructors administered the questionnaires, which required about ten minutes to complete.

The questionnaire was described as "a preliminary survey of lying behavior," and contained seven items. The first requested students to recall a lie and describe it. The remaining six items referred to that lie. Question two asked subjects to classify the lie as being intentional or unintentional ("perhaps a slip"). The third item asked, "What did you hope to achieve with the lie?" Question four asked if anything else had been tried prior to the lie. The last three items were seven-step semantic differential scales designed to measure satisfaction. The first of these asked respondents to rate how well the lie worked, from perfectly successful to perfectly unsuccessful. Item six asked for a rating of satisfaction "with your own performance" on a scale bounded by perfectly satisfied and perfectly unsatisfied. Using the same scale, the last item asked subjects to rate "how satisfied with yourself you were." The author did all necessary coding of open-ended responses.

Personal interviews were conducted with thirteen volunteers who were students in the basic interpersonal communication course. The course instructor, a male, served as interviewer. The conversations were tape-recorded and took place out of class. Lying had not been discussed in class prior to the interviews. Students were told simply that the research concerned lying. Each interview lasted about ten minutes. No subjects reported being bothered by the tape recorder.

Though each interview departed in some degree from the preliminary protocol, the usual sequence of questions was as follows. The first request was always "to think of a lie you have told and relate it to me." The silence which followed was not interrupted. Once the lie was recounted, the interviewer sought details (if they were lacking in the spontaneous summary). Students were probed for the target person of the lie, the lie's objective, intentionality, precedent for the lie, alternatives tried, and the general biographical period of the lie. Students were then shown the semantic differential scales used in the questionnaire study and were asked for their ratings. Near the end of the interview, students were asked whether they lied more in the first or second halves of their lives, and why they "happened to recall that particular lie." Finally, they were asked if the tape recorder made them uncomfortable (it was sitting on top of the desk being used) and for general reactions to the interview.

The interviewer and the author coded several obvious variables from each interview: to whom the lie was told, intentionality, whether the lie was contemporary or from childhood, alternatives to the lie, length of pause after the request to recount a lie, responses to the semantic differential scales, which half of the respondent's life involved more lying, and sex of respondent. Consensus on all these codings was reached without difficulty.

Several variables required finer judgments, and so were coded by twelve upper-classmen enrolled in the author's course in measurement of communication variables. The work was done to fulfill course requirements, but quality of coding was not graded.

The first student-coded variables were objective of lie, precedent for lie and reason for salience. Objectives were coded as they were initially stated by respondents, and were then coded again after (if) the respondents presented additional justifications. The same categories were used both times:

to benefit the liar, to benefit the person (or institution) lied to, to put someone on, uncodable or other. Intercoder agreement on use of the modal category was 78.2% for the goal as initially stated, and 71.2% for the objective as it eventually emerged. The next variable required listeners to code each lie as being one-shot, habitual (i.e., precedented), uncodable or other. This category system yielded 75.0% coder agreement. Salience was the next variable. Here, coders classed the reason for recalling the lie: recently told, recently reminded about it, felt guilty about it, a turning point in my life, uncodable or other. Intercoder agreement was 71.2%.

The other variable for which coders provided data was rationalizing.⁹ Categories were: I was hesitant to lie, the lie was beneficial, I will make up for having lied, everyone lies, I felt guilty later, I was a different person then, there was really no deception, and other. Based only on whether or not the rationalization appeared at all during the interview, the following percentages of intercoder agreement were obtained for the eight categories of rationalization just listed: 69.9%, 72.4%, 78.8%, 79.5%, 71.2%, 94.2%, 91.0% and 78.2%.

Though few of the indices of intercoder agreement are particularly high, all are judged sufficient to admit the data for exploratory analysis.

Results and Discussion

Upon completing the questionnaires, students in all three classes spontaneously exchanged forms and began chuckling. One can only speculate as to the reasons for this reaction. The obvious threat to the study is the possibility that the students' enjoyment was at the expense of their veracity. However, it may also be that students were genuinely amused at their recollections (an interpretation which inspection of the responses makes plausible, but not compelling). Suspicions regarding this reaction were a major reason for using personal interviews in the second phase of the project, where no analogous behaviors were observed.

The first quantitative results concern the targets of the lies, and are presented in Table 1. Twice as many of the questionnaire-recounted lies were told to superiors as to peers.¹⁰ This ratio greatly enlarges for the interview data. There, the percentage of lies told to superiors is significantly different from what would be predicted by chance ($z=2.45$, $p<.05$) but is not significantly different from the questionnaire results ($z=1.55$, $p<.15$).¹¹ That the proportion of lies directed to teachers did not drop substantially in the interview data may be surprising in view of the fact that students were being interviewed by their instructor. But a possible explanation for this, as well as for the higher proportion of lies to superiors in the interviews, is the difference in the studies' environments. The questionnaire data were provided when respondents were surrounded by peers, and when the instructor was passive. During the interview, however, the instructor was in active control, and may therefore have made lies to superiors more salient (in fact, one respondent actually reported having lied to the interviewer earlier in the day).

 INSERT TABLE 1

Table 2 reports data on the purposes for which respondents said they lied. In the questionnaire study, nearly two-thirds of the lies were admittedly intended to benefit the liar. About a quarter of the deceptions were for the advantage of another person or an interpersonal relationship (e.g., to keep a boyfriend from becoming upset and threatening to date someone else). The use of personal interviews allowed motives to be probed, and respondents tended to reshape their motive reports as the conversations went on. Subjects' initial statements of purpose do not differ from the (presumably initial) questionnaire explanations ($\chi^2=1.79$, $p<.50$).¹² But the motivational

descriptions students eventually settled on were noticeably different from the initial explanations when the "lies to benefit self" data are examined, though the comparison does not quite attain statistical significance ($z=1.65$, $p<.10$). No one in the interviews claimed to be lying in order to benefit an interpersonal relationship, but this was probably because none of the lies were told to dating partners or spouses (see Table 1). In general, students' immediate explanations--which one would expect to be least corrupted by second thoughts or evaluation apprehension--picture the enterprise of deceit as essentially self-centered.

 INSERT TABLE 2

The questionnaires requested that students list anything tried before deciding¹³ to lie. Only ten subjects (25.6%) reported trying any alternatives. The most popular was avoidance, either by saying nothing ($N=2$), avoiding the situation (3) or trying to disguise the situation (1). The most significant finding here, of course, is that three quarters of the respondents found themselves in situations which seemed automatically to require a lie. These situations were usually not avoided, but were apparently familiar enough that students did not struggle with alternative courses of action. The interviews provided the key to understanding these results. There, ten of thirteen students tried no alternatives. But three of the lies had very obviously been told several times before, and others may well have been. It could be, of course, that some element in the situation automatically cues deceit. But a more likely explanation for these unhesitant lies is that the entire situation is a near-replication of an earlier one in which a lie had been used (e.g., claiming that a weekend trip would be chaperoned). This argument implies that any experimental research on adults' lies will require completely

foreign settings in order to avoid confounding experimental treatments with subjects' histories.

Three types of satisfaction--with self, with own performance, and an assessment of the lie's effectiveness--were measured, and results appear in Table 3. In both investigations, respondents were least satisfied with themselves, and most satisfied with the lie's effectiveness. Correlations indicate that satisfaction with own performance is strongly associated with the lie's effectiveness. In the questionnaire study, self-satisfaction is related to the success of the lie, but not in the interview data.¹⁴ Taken together, these results suggest that although lies are effective enough to justify their use, violation of the social proscription against deceit causes self-satisfaction to be less than lie-satisfaction.

INSERT TABLE 3

A major reason for using personal interviews was to examine rationalizations and other indications that the liars felt uncomfortable. The remaining results in this section apply only to the interviews.

Rationalizations were coded in an attempt to elaborate on the effects of lying. Eight categories of rationalization were available, and the mean number of categories used by each respondent was 3.39 (s.d.=1.39). The most frequent rationalizations were declarations of hesitancy in lying (N=11; note how this compares with the three subjects who actually tried an alternative), claims of the lie's beneficial consequences (8), avowals of guilt feelings afterwards (8) and promises to make up for the lie sometime in the future (6). Less popular were reminders that everyone lies (4; but the interviewer usually made this remark early in the conversation in an attempt to make the questions less threatening), estimates that the target

person was probably aware of being lied to (3) and one assertion (for a childhood lie) that the liar and the respondent were substantively different people. Such rationalizing appears to be unrelated to satisfaction. Correlations between number of rationalization categories used and satisfaction with self, lie and performance clustered around zero ($r = -.28$, $p < .40$; $r = .28$, $p < .40$; and $r = -.14$, $p < .70$, respectively).

Other possible indicants of unease also failed to show convergent results. The length of the silence following the invitation to retell a lie averaged 55 seconds, but did not correlate significantly with number of rationalization categories used ($r = -.25$, $p < .45$). Nor did it correlate with any of the satisfaction indices ($r = -.19$, $p < .60$; $r = -.24$, $p < .50$; and $r = .01$, $p > .95$, in the same order as above). Another inconclusive set of analyses divided respondents into two groups: those who maintained the same purpose for the lie throughout the interview, and those who modified their explanations. The groups did not differ significantly on length of pause, on number of rationalization categories used, or on any of the satisfaction indices.¹⁵ Clearly, these variables are not different aspects of one construct (e.g., unease) and so should be studied only for their intrinsic interest, if at all.

A final group of descriptive data has to do with the salience of the reported lies. Both studies are challenged by the possibility that the lies analyzed are not typical of all lies. When respondents in the interviews were requested to explain why they happened to recount the lie under discussion, seven of them provided unhelpful answers (most typically, "I don't know--I just thought of it"). Of the remaining six subjects, however, five said that they had recently told the lie or had recently been reminded of it (the sixth said his lie was a turning point in his life--this was the childhood lie). The recency explanations are reassuring insofar as generalizability of results is concerned: though the procedure is hardly rigorous, saliency explanations

suggest that the method used in these two studies approximates temporal sampling. That is, the lies on which data were provided tend to be simply recent ones, with no evident social, moral, financial or other selection biases.

Impersonal Estimates

Though the results of the first two studies are comfortingly consistent in several respects, both investigations share two easily corrected problems. Each (but particularly the second) was conducted with small samples, which naturally depresses the sensitivity of the statistical analyses. Another problem is the possibility of evaluation apprehension: students were asked to confess to an act universally condemned. Interview results showed students' hesitations, their frequent attempts to repair their images ("I'll probably tell Mom about it in twenty years or so, when I have lots of kids myself. . ."), and both studies show that subjects claim to feel less satisfied with themselves that with their lies. The first two findings no doubt reflect the anti-lie norm during the data elicitation. The last result, however, may manifest the norm's impact at either the time of the lie or the time of the study. Short of actually inducing voluntary lies in the lab and measuring guilt unobtrusively--a formidable ethical and creative task--the best procedure will simply attempt to reduce evaluation apprehension before examining the pattern of lie and self satisfactions. This strategy is the one followed here, and is implemented by asking respondents only about other persons' lies. Though respondents may still be biased toward the more socially desirable responses (i.e., that liars are dissatisfied with themselves relative to their lies), the present approach should greatly reduce the pressure toward that bias.

The survey described below focuses on a slightly different group of variables. A new variable of particular interest is added: an estimate of

the average weekly frequency of lying. Roughly the same categories of lie targets and purposes are used, but respondents here judge both why people say they lie and why they actually do. This elaboration, of course, is due to the plethora of rationalizations noticed in the interviews. Those interviews also produced the impression (not mentioned earlier in this report) that most of the lies were responsive: that is, the liar was suddenly faced with a lie-provoking problem. Only rarely did a liar carefully plan how to enter a situation in order to lie. To test this impression, respondents were asked whether lies are usually volunteered or responsive. The general search for a description of lie-provoking situations is continued here only in the guise of the request to gauge whether lies are typically repeated or told only once. The seven-step satisfaction scales were used as usual, except that they were suitably re-worded.

Based on the results of the personal history studies, there seem to be sufficient grounds for the hypotheses that superiors will be the dominant target of lies; and that the percentage of lies to peers and superiors will not be different from those obtained in the earlier studies. It is also hypothesized that self-satisfaction will be significantly lower than either satisfaction with the lie performance or the success of the lie; and further, and the latter two are not themselves significantly different. Analysis of all other results will continue to be descriptive in tone.

Method

Seventeen undergraduates enrolled in the investigator's research methods course surveyed 314 other students. Of the respondents, 73 were freshmen, 69 sophomores, 81 juniors, 66 seniors, and 24 were graduate or special students. As for gender, 137 were male and 176 were female. (Some data were missing for one respondent.)

Two procedures were used to select respondents. In face to face interviews, the students were instructed to find respondents in "neutral" parts of the campus (e.g., the union, the administration building) and to avoid doing much interviewing in places frequented by only part of the student body (e.g., the physics building, residence halls). The remaining interviews were carried out by telephone. Interviewers randomly sampled the student portion of the campus phone directory, which probably underrepresents off-campus students. Two call-backs were made if the listed individual was not initially available. In all, 165 interviews were done in person, and 149 over the phone.¹⁶

The survey schedule contained eleven items. After explaining that the study concerned "not how much you lie, but what you think about other people's lies" and that lying is "intentionally saying something that is known to be false," interviewers asked the first question: "In general, how often do you think most people lie every week?" The second item concerned "who you think people lie to the most." Respondents were given seven groups of possible targets--mother, father, brothers and sisters, dating partners or spouses, friends or roommates, teachers, and employers--and were asked to rank order the three most frequent targets. The third item also called for rank ordering. Three possible reasons for lying were listed--to benefit self, to benefit the person lied to, and to establish or maintain a relationship with the person lied to. Respondents then ordered the purposes according to "why you think people say they lie," and then again according to "why they really lie." Question four asked interviewees whether they thought more lying takes place between the ages of 1 to 10 or 11 to 20. The fifth item requested an estimate of the percentage of lies told once, as opposed to being told repeatedly. For the sixth question, respondents were asked to judge the percentage of lies which are volunteered, as opposed to being told

in response to a question. Examples were provided for both questions five and six. Items seven, eight and nine were the seven-step satisfaction scales. "How well most lies work" was rated on the interval from perfectly unsuccessful to perfectly successful. The next item asked for an estimate of "how satisfied most people are with their lies," and item nine asked "how satisfied most people are with themselves right after telling a lie." The respondent finally supplied year in school, and the interviewer completed the form by noting the student's sex.

Results and Discussion

The first hypothesis concerned the proportion of lies aimed at superiors, as well as the similarity of the distribution of lie targets obtained here to those reported earlier. Respondents rank-ordered three of seven possible targets. Table 1 reports two types of data from the survey. In one pair of columns, the frequency with which each applicable category of target was ranked first is reported. In addition, a simple weighting scheme was used to produce the data in the last two columns: first ranks were multiplied by three, second ranks by two, and third ranks by one.

The first part of the hypothesis is easily supported for both first-ranked and weighted data. The percentage of lies to superiors was compared to that expectable by chance (50%) and found to be different for both first-ranked ($z=8.68$, $p<.001$) and weighted ($z=16.93$, $p<.001$) data. The reader will recall that earlier comparisons of the questionnaire and interview studies revealed no statistically significant differences in target percentages. Targets identified by the survey are also not reliably different from earlier results, in spite of the large sample size in the present study. Comparisons of lies to superiors between first-ranked targets and questionnaire results ($z=1.84$, $p<.10$) and interview data ($z=0.82$, $p<.45$) failed to meet conventional significance standards. Similar results obtained

when the weighted data are compared to those from the questionnaire ($z=1.19$, $p<.10$) and the interviews ($z=1.18$, $p<.10$). The results of all three studies taken together show that about three quarters of all lies are directed to superiors, with nearly all others being told to peers.

Data on the objectives of lies are reported in Table 2. Weights are assigned to ranked data as for Table 1. Table 2 reports results on both why people say they lie ("alleged"), and why they actually do.

Significance tests using χ^2 were calculated to compare distributions of objectives among and within the studies. Because of the sensitivity of χ^2 to sample size, ϕ^2 , an index of strength of association between the objectives and the study (or question) is also reported. For these data, ϕ^2 can range from zero to one.

Within the survey data, comparisons of alleged and actual reasons for lying show significant, but usually minor, departures. First-ranked alleged and actual objectives have a different distribution ($\chi^2=166.27$, $p<.001$), and a noticeable relationship to the different questions asked ($\phi^2=.27$). This relationship weakens, however, when first-ranked alleged objectives are compared to weighted actual goals ($\phi^2=.05$, $\chi^2=118.53$, $p<.001$), when weighted alleged goals are compared to first-ranked actual motives ($\phi^2=.11$, $\chi^2=240.93$, $p<.001$), and when weighted alleged and actual goals are compared ($\phi^2=.03$, $\chi^2=104.16$; $p<.001$). On the whole, only first-ranked items seem to be reasonably sensitive to the difference between alleged and actual objectives. As one might expect, most of the difference between given and actual reasons for lying is related to selfish motives; this is the category whose frequency is most altered by the change in question. People are thought least likely to admit self-benefit is a lie's goal, but are seen as most likely to lie for this reason.

Objectives found in the survey data show statistically significant but associationally small departures from those in the earlier studies (only the initial data from the interviews are used here). First-ranked alleged reasons are significantly different when contrasted with questionnaire results ($\chi^2=33.69$, $p<.001$, $\phi^2=.10$) or interview data ($\chi^2=14.77$, $p<.001$, $\phi^2=.05$), but in each case the relationship is quite weak. Weighted alleged objectives show similar results: $\chi^2=28.06$, $p<.001$, $\phi^2=.02$ for the questionnaire comparison; and $\chi^2=11.50$, $p<.01$, $\phi^2=.01$ for the interviews. Actual reasons also show little departure. First-ranked actual reasons differ weakly from both questionnaire ($\chi^2=7.21$, $p<.05$, $\phi^2=.02$) and interview ($\chi^2=10.08$, $p<.01$, $\phi^2=.03$) results. Weighting the actual reasons weakens the relational index even further: $\chi^2=9.77$, $p<.01$, $\phi^2=.01$ for the first study; and $\chi^2=5.47$, $p<.10$, $\phi^2=.00$ for the second. In spite of statistically significant differences, therefore, survey results are judged to be generally comparable to the earlier ones, insofar as reasons for lying are concerned.

All the data on lying purposes consistently support several observations. Based on results of the in-class questionnaire, the initial reasons offered in the interviews, and the actual reasons perceived by survey respondents, it seems that about two-thirds of all lies are told to benefit oneself. People are loathe to admit this, however. When given an opportunity to generate more acceptable reasons, as they were in the interviews, they tend to offer other, less selfish explanations. This tendency is clearly anticipated by survey respondents, as reflected in the "alleged" columns of Table 2.

Contingency tables were examined for evidence of mutual dependence between first-ranked target, actual reason and alleged reason for lying. The only statistically significant effect uncovered was between actual and

alleged reasons for lying ($\chi^2=9.54$, $p<.05$, $\phi^2=.03$). The result occurs because lies that are actually done to benefit a relationship or another person are also explained that way. Target is not reliably related to either actual ($\chi^2=15.05$, $p<.25$) or alleged ($\chi^2=7.95$, $p<.80$) purposes for lying.

Results of the satisfaction items, shown in Table 3, support the relevant hypotheses. As predicted, self-satisfaction was significantly different from both success of lie and satisfaction with the lie. Satisfaction with the lie correlated with the lie's success, and accordingly, these variables showed no reliable mean differences, as predicted. About a tenth of the variance in self-satisfaction is explained by satisfaction with the lie, and less by the lie's success. These correlational results are generally, but not strikingly, consistent with the correlations obtained in the earlier investigations.

Attempts to identify other systematic sources of variation in satisfaction scores generally failed. Several analyses of variance, using all three satisfaction indices as dependent variables, failed to show a single significant main or interaction effect. The first analyses used three independent variables: first-ranked target, alleged reason and actual reason for lying. The other analyses considered sex and year in school, but with similarly insignificant results. Correlations between the satisfaction indices and number of lies told per week, the percentage of repeated lies and the percentage of volunteered lies were all insignificant and less than $r=.10$, with these exceptions: number of lies is related to the estimated success of lies at $r=.11$ ($p=.056$); success of lies correlates with percentage volunteered at $r=.10$ ($p=.074$); and self-satisfaction relates to the percentage volunteered at $r=.17$ ($p<.01$). These results are uniformly discouraging. None of the variables studied here having to do with motives or targets

for lying, age or sex of informant, or perceived characteristics of most lying behavior (i.e., how often it occurs, whether it is habitual or spontaneous) bear any important relationship to perceived satisfaction with either self or lie.

Respondents estimated that 49.44% of all lies are repeated (s.d.=25.07), and that only 37.44% of lies are volunteered (s.d.=22.96). With about half the lies repeated, but two-thirds responsive, it seems evident that some lies are a permanent part of people's array of communicative responses to certain interpersonal situations. The relative cost to self-satisfaction involved in use of deceit, however, suggests that these lies will be used sparingly, and only when success is far more than marginally likely.

The last variable of major interest is the frequency of lying. Respondents estimated that the typical person lies 13.03 times per week (s.d.=19.80). As noted above, neither success in lying nor satisfaction with self after lying controls any important portion of the variation in lying frequency. An analysis of the variance in frequency of lies, using first-ranked target, alleged reason and actual reason for lying as independent variables, did not reveal any significant main or interaction effects. Another analysis using age and sex of respondent showed a significant effect for respondent's year in school ($F=2.52$, $p<.05$) but none for sex or the interaction. And since the R^2 for this analysis was only .04, even this result is of minor importance. Similarly negligible are the significant relations between number of lies and the frequency with which lies are told (more lies are estimated when lies are thought to be told only once: $r=.11$, $p<.05$), and the tendency for lies to be responsive rather than premeditated ($r=.16$, $p<.01$). In sum, the overall frequency of lying is not thought to be importantly related to any of the lying variables studied here; nor is it materially determined by the year in school or sex of the respondent.

This final study, then, yields support for hypotheses that now suggest generalizations about the most likely targets of lies and the relation between self and lie satisfaction. However, attempts to identify important determinants of self satisfaction or predictors of lying frequency were unsuccessful. At the points where comparisons were possible, this last study's results were shown to be generally comparable to those of the earlier investigations, in spite of major methodological departures in observational modes.

Conclusions

The objective of these studies has been to describe the purposes and effects of lying. The assumption that lies are indeed purposive has been clearly sustained by the unanimous understanding that lies are intentional. Falsehoods may, of course, be unintentional for a number of reasons--a slip of the tongue, a pathology,¹⁷ a conveniently misleading inference by someone else--and a person may choose to continue such a fiction. But the results of the studies recorded here apply specifically to lies told with open eyes.

Purposes

These investigations reveal little about the circumstances of lying, but the hints that do appear seem to bear on the issue of purpose. The questionnaire finding that liars do not often try any alternatives to lying found its explanation in the interviews. Several of the lies reported there had clearly been told more than once, and most of the others seemed likely to have been used in earlier situations. However, the decision to lie is not cued by some abstractable quality of the situation (for example, one might hypothesize that threat stimulates lying). Rather it appears that the specific situation (e.g., talking to mother about sex over the phone) cues a specific lie ("Of course not, Mom"). Whatever the cause of the first such

lie, its progeny become a stable part of the interactional repertoire. Though it is just as well that descriptive studies such as these should use stabilized lies for data, developmental studies identifying the reasons for early lies--and the conditions under which some lies become stable responses--would be extremely valuable.

Collecting data on permanent lies means that motives are being studied at one remove. Though the lies are clearly intentional, they may also be automatic responses--not necessarily reasoned, unambiguously motivated acts.

In spite of this difficulty, several consistent results yield a general picture of the purposes for lies. In line with the literature showing that deception can be prompted by personal gain--money, grades, career advancement¹⁸--lies are most frequently motivated by a desire to benefit oneself. In fact, selfishly-motivated lies outnumber all others by about two to one. This conclusion is indirectly supported by the data on targets of lies. Nearly three-quarters of all lies are told to superiors. Such a finding suggests that lies are a means of social or economic defense in a disadvantaged situation, recalling the bargaining research mentioned in the introduction to this report.¹⁹ Although exceptions are easily imagined, it seems most likely that self-defense would be the dominant concern in such interactions. One last bit of consistent evidence is the observation that most of the lies were responsive. Lies appear not to be an aggressive weapon in competitive or threatening exchanges. Rather, they appear to be a (successful) answer to challenge. Assuming that challenges are more likely to come from dominant interactants, lies' typically responsive nature underscores their usually self-defensive purposes.

Effects

The typical liar is torn by a felt need to lie on one hand, and by the force of social proscription on the other. A consistent finding in all three studies is that liars are (or, in the case of the survey results, are expected to be) substantially more satisfied with the lie than with themselves. A likely consequence of this is that to be told, a lie must be certain to achieve some valuable end. The liar knows that lies should not be told at all, and so lies only when rewards are both assured and large. (This, incidentally, is another reason for believing that most lies are field-tested, and the successful ones used repeatedly.)

The lies studied here were often successful. The lie's success, however, had little power to raise self satisfaction. Correlations between satisfaction with lie and with self were always unable to explain at least 75% of the variation in self satisfaction. This was true in the questionnaire on personal history, where success rated at 5.74 and self satisfaction 4.18 on seven-step scales, and was also true for impersonal survey results, where the figures were both noticeably lower (4.01 and 2.99, respectively).

Several independent findings seem to show that lies exact personal costs. Respondents in the interviews were the most fertile source of data on unease. They had trouble recounting lies, taking about a full minute to begin the retelling--and this in spite of the survey's estimate that people lie nearly twice a day, and in spite of the indication that the recounted lies were recent ones. It is not far-fetched to suppose that social norms were reducing the efficiency of people's memories for their lies.

Rationalizations were clearly evident in the interviews, and were often suspected while reading the protocols from the first investigation. Interviewees gave an average of more than three types of excuse for lying

in only ten minutes of conversation. The most frequent actual and claimed reasons for lying were clearly different in the survey. Lying to benefit self, the least socially approved motive, was thought to be greatly under-claimed in comparison to actual purposes. In interviews as well, respondents tended to waffle regarding their reasons for having lied, vacillating between selfish and social motives.

The low correlations between these various indicants of unease suggest that although lying may be personally expensive, our accounting of the costs will not be simple. In addition to the types of cost explored in these investigations, a full audit must consider non-verbal indices of anxiety,²⁰ internal physiological stress²¹ and feelings of guilt.²²

Future work on lying should remain focused on purposes and effects. Lies have clearly-felt rewards and costs. The way people balance personal gain and loss for such communication ought to be the central research question in this area.

Footnotes

¹Douglas Ehninger, "On Inferences of the 'Fourth Class,'" Central States Speech Journal, 28 (1977), 158 and passim. Italics omitted. Also see Robert E. Nofsinger, Jr., "The Demand Ticket: A Conversational Device for Getting the Floor," Speech Monographs, 42 (1975), 1-9, especially 6-7.

²See Mark L. Knapp, Roderick P. Hart and Harry S. Dennis, "An Exploration of Deception as a Communication Construct," Human Communication Research, 1 (1974), 15-29, or Joyce E. Bauchner, D. R. Brandt and Gerald R. Miller, "The Truth/Deception Attribution: Effects of Varying Levels of Information Availability," in Brent D. Rubin (ed.), Communication Yearbook I (New Brunswick, N. J.: Transaction-I.C.A., 1977), pp. 229-43, for an example of detection research.

³Claude S. Fischer, "The Effect of Threats in an Incomplete Information Game," Sociometry, 32 (1969), 301-14; Frank J. Monteverde, Richard Paschke and James T. Tedeschi, "The Effectiveness of Honesty and Deceit as Influence Tactics," Sociometry, 37 (1974), 583-91. A similar but non-significant tendency is reported in Charles L. Gruder, "Relationships with Opponent and Partner in Mixed-Motive Bargaining," Journal of Conflict Resolution, 15 (1971), 403-16.

⁴Robert Kleck, Hiroshi Ono and Albert H. Hastorf, "The Effects of Physical Deviance upon Face-to-Face Interaction," Human Relations, 19 (1966), 425-36; Joel Cooper and Edward E. Jones, "Opinion Divergence as a Strategy to Avoid Being Miscast," Journal of Personality and Social Psychology, 13 (1969), 23-30.

⁵Herbert Harari and John W. McDavid, "Situational Influence on Moral Justice: A Study of 'Finking,'" Journal of Personality and Social Psychology, 11 (1969), 240-44; Esther R. Greenglass, "Effects of Age and Prior Help on

'Altruistic Lying,'" Journal of Genetic Psychology, 121 (1972), 303-13.

⁶Fischer. This result may depend in part on the social position of the liar. See David W. Wilson and Edward Donnerstein, "Legal and Ethical Aspects of Nonreactive Social Psychological Research: An Excursion into the Public Mind," American Psychologist, 31 (1976), 765-73; they report that more people think social scientists have a right to deceive the public (26%) than think the military (9%) or politicians (2%) have such license.

⁷Richard de Mille and Morton A. Hirschberg, "Multivariate Analysis of Concepts Induced from Bounded Predicative Value-Statements," Multivariate Behavioral Research, 7 (1972), 41-66.

⁸Knapp, et al.

⁹Everything tending to make the subject "look good" or tending to justify the lie was coded as a rationalization. This was done to avoid the problem of trying to gauge the truth of a claim or the respondent's real intentions.

¹⁰For lack of a theoretical base, significance tests were not calculated for the questionnaire study results. These data, however, provided a basis for comparison which justified significance testing on the interview data. The satisfaction results are an exception: significance tests were performed from the first. All tests in this paper are two-tailed.

¹¹The power of this latter test is only .34. See Jacob Cohen, Statistical Power Analysis for the Behavioral Sciences (New York: Academic Press, 1969), p. 189. All power calculations made for this paper assume $\alpha = .05$, two-tailed tests and medium effect sizes.

¹²The power of this test is .61. Cohen, p. 229.

¹³Results showed that all the lies in both studies were intentional.

¹⁴The power of this test is only .16. Cohen, p. 89.

¹⁵Only for number of rationalizing categories did t even exceed one ($t=1.40$, $p<.20$). The power of the t -tests is .23. Cohen, p. 34.

¹⁶Type of interview was used to classify respondents into groups for t -tests. No significant differences were found for these variables: number of lies per week, the age at which most lies occur, the success of lies, satisfaction with lies, satisfaction with self, and sex. For other variables, χ^2 was used to test for differences between interview groups. No significant differences were found for first, second ($p<.10$) or third ranked targets, for first, second or third ranked reasons people say they lie, or for first, second or third ranked reasons people actually lie. Only for year in school was a significant difference found ($t=3.24$, $p<.001$), with phone respondents being about four-tenths of a year younger. In view of all these results, the two surveys are regarded as equivalent and reported results will no longer distinguish them.

¹⁷See M. J. Stones, "A Study of a Pathological Liar," Social Behavior and Personality, 4 (1976), 219-23, for an example.

¹⁸This research typically concerns itself with cheating in school or on job application forms, and so is relevant only by analogy; consequently, it was not reviewed in detail earlier. See: Elliot Aronson and David R. Mettee, "Dishonest Behavior as a Function of Differential Levels of Induced Self-Esteem," Journal of Personality and Social Psychology, 9 (1968), 121-27; Richard A. Dienstbier, "The Role of Anxiety and Arousal Attribution in Cheating," Journal of Experimental Social Psychology, 8 (1972), 168-79; Richard A. Dienstbier and Pamela Osborne Munter, "Cheating as a Function of the Labeling of Natural Arousal," Journal of Personality and Social Psychology, 17 (1971), 208-13; Marvin D. Dunnette, Jean McCartney, Howard C. Carlson and Wayne K. Kirchner, "A Study of Faking Behavior on a Forced-Choice Self-Description Checklist," Personnel Psychology, 15 (1962), 13-24;

John V. Flowers, "Behavior Modification of Cheating in an Elementary School Student: A Brief Note," Behavior Therapy, 3 (1972), 311-12; Michael E. Gordon and M. M. Petty, "A Note on the Effectiveness of Research Conditions in Reducing the Magnitude of Dissimulation on a Self-Report Criterion," Personnel Psychology, 24 (1971), 53-61; Richard G. Graf, "Induced Self-Esteem as a Determinant of Behavior," Journal of Social Psychology, 85 (1971), 213-17; E. Mavis Hetherington and Solomon E. Feldman, "College Cheating as a Function of Subject and Situational Variables," Journal of Educational Psychology, 55 (1964), 212-18; John P. Houston, "Learning and Cheating as a Function of Study Phase Distortion," Journal of Educational Research, 69 (1976), 247-49; John P. Houston, "Cheating Behavior, Anticipated Success-Failure, Confidence, and Test Importance," Journal of Educational Psychology, 69 (1977), 55-60; John P. Houston and Toni Ziff, "Effects of Success and Failure on Cheating Behavior," Journal of Educational Psychology, 68 (1976), 371-76; Charles D. Johnson and John Gormly, "Achievement, Sociability, and Task Importance in Relation to Academic Cheating," Psychological Reports, 28 (1971), 302; David L. McMillen, "Transgression, Self-Image, and Compliant Behavior," Journal of Personality and Social Psychology, 20 (1971), 176-79; Jim Millham, "Two Components of Need for Approval Score and Their Relationship to Cheating Following Success and Failure," Journal of Research in Personality, 8 (1974), 378-92; Thomas K. Srull and Stuart A. Karabenick, "Effects of Personality-Situation Locus of Control Congruence," Journal of Personality and Social Psychology, 32 (1975), 617-28; Charles R. Tittle and Alan R. Rowe, "Moral Appeal, Sanction Threat, and Deviance: An Experimental Test," Social Problems, 20 (1973), 488-98; Frank T. Vitro and Lowell A. Schoer, "The Effects of Probability of Test Success, Test Importance, and Risk of Detection on the Incidence of Cheating," Journal of School Psychology, 10 (1972), 269-77.

¹⁹See note 3.

²⁰See Knapp, et al, and Bauchner, et al.

²¹See Dienstbier, and Dienstbier and Munter.

²²See McMillen, and David L. McMillen and James B. Austin, "Effect of Positive Feedback on Compliance Following Transgression," Psychonomic Science, 24 (1971), 59-61.

Table 1
Targets of Lies

Source of Data: Targets	<u>Personal Histories</u>				<u>Impersonal Estimates</u>			
	Questionnaires		Interviews		First- Ranked	Weighted		
	N	%	N	%		N	%	N
Superiors	23	50.5	11	84.6	234	74.5	1309	69.5
Parents	11	28.9	8	61.5	103	32.8	577	30.6
Teachers	7	18.4	3	23.1	80	25.5	433	23.0
Employers	4	10.5			51	16.2	299	15.9
Policemen	1	2.6						
Peers	12	31.6	2	15.4	80	25.5	575	30.5
Dating Partner	6	15.8			42	13.4	297	15.8
Friend/Roommate	5	13.2	2	15.4	31	9.9	199	10.6
Siblings	1	2.6			7	2.2	79	4.2
Other	3	7.9						

Table 2
Objectives of Lies

Source of Data:	Personal Histories						Impersonal Estimates					
	Question- naires		Inter- views		Inter- views		First- Ranked		First- Ranked		Weighted	
			Initial		Final		Alleged		Actual		Alleged	
	N	%	N	%	N	%	N	%	N	%	N	%
Objective												
Benefit Self	24	63.2	8	61.5	5	38.5	74	23.6	230	73.2	544	28.9
Benefit Relation	4	10.5					129	41.1	65	20.7	704	37.4
Benefit Other	6	15.8	3	23.1	5	38.5	111	35.4	19	6.1	635	33.7
Other	4	10.5	2	15.4	3	23.1						

Table 3
Satisfaction Results:
Means, t-Tests and Correlations

Variable	Mean _Q	Mean _I	Mean _S
(1) Lie's Effectiveness	5.74	5.50	4.01
(2) Satisfaction with Performance	5.32	4.75	4.11
(3) Self Satisfaction	4.18	3.33	2.99

Compare	t _Q	t _I	t _S	r _Q	r _I	r _S
(1) v. (2)	1.73†	1.30	1.10	.65***	.56†	.48***
(1) v. (3)	4.64***	2.94*	9.91***	.47***	.03	.24***
(2) v. (3)	3.97***	2.20*	11.06***	.61***	.39	.36***

Note. Subscripts refer to observation modes: Q=in-class questionnaire; I=personal interviews; and S=combined face-to-face and phone surveys.

†p<.10

*p<.05

**p<.01

***p<.001